

**County of Loudoun**  
**Department of Planning**  
**MEMORANDUM**

**DATE:** October 5, 2009

**TO:** Mike Elabarger, Project Manager  
Land Use Review

**FROM:** Kelly Williams, Planner III  
Community Planning

**SUBJECT: ZCPA 2009-0007 & ZMOD 2009-0004 Belmont Glen Village**

**EXECUTIVE SUMMARY**

This application is proposing a zoning concept plan amendment to amend ZMAP 2004-0006, Rouse/Belmont Glen to change the existing R-8 Traditional design option to the standard R-8 design option on property located within Suburban Policy Area. The property is currently zoned PD-H3, Planned Development Housing.

The proposed residential development is consistent with the Plan's land use vision for this subarea. However, there are issues related to unmet housing needs, site design issues related to the street layout and pedestrian circulation network, and environmental issues related to the 300-foot Goose Creek no build buffer, steep slopes and wetlands which must be addressed prior to approval of this plan.

**BACKGROUND**

Bayshire, L.C. is requesting a zoning concept plan amendment to amend ZMAP 2004-0006 to change the R-8 traditional design option to the standard R-8 design option for 196 single-family detached dwelling units at a density of 1.37 dwelling units per acre.

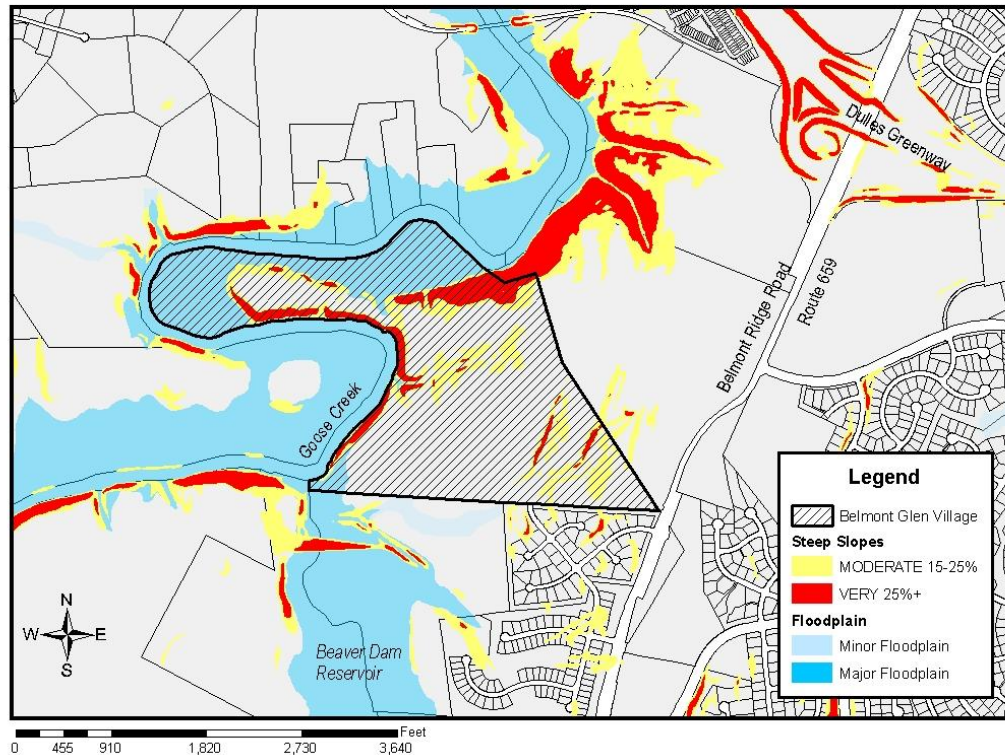
The subject property is located on the west side of Route 659 (Belmont Ridge Road), north of the Beaverdam Reservoir and east of Goose Creek. The property is also located approximately one mile south of the Route 659 grade-separated interchange on the Dulles Greenway, and across Route 659 from the Broadlands planned community.

The application includes a revised Concept Development Plan and statement of justification. No proffers have been included in this submittal.

A review of County GIS records indicate major floodplain is located along the western border of the subject property. Steep slopes are located adjacent to the major

floodplain and along the western boundary of land bay A. There is significant forest cover within the floodplain area and in the southeastern corner of the subject property. There are known archeological features on the site which were identified in the previous rezoning approval. Potential wetlands have also been identified.

### Location Map



### COMPLIANCE WITH THE COMPREHENSIVE PLAN

Guidance for development of the subject property is provided by the Revised General Plan. The Revised Countywide Transportation Plan, the Countywide Retail Plan Amendment ('Retail Plan') and the Bicycle and Pedestrian Mobility Master Plan ('Bike/Ped Plan') also apply. The site, located in the Ashburn Community of the Suburban Policy Area, is designated for Residential Community uses (Revised General Plan, Planned Land Use Map).

The proposed application has been reviewed under the Revised General Plan Suburban policies of Chapter 6, specifically the Residential policies; the Green Infrastructure policies of Chapter 5 and the Design Guidelines in Chapter 11 for Residential uses. The Bike/Ped Plan policies of Chapter 4, have also be applied to this development.

## **ANALYSIS**

### **A. LAND USE**

Residential Neighborhoods should have a variety of housing types and lot sizes, and they are to be developed in accordance with design guidelines and performance standards for efficient site layout, a pedestrian-friendly scale, adequate open space (active, passive, and natural), and the protection and incorporation of the Green Infrastructure (Revised General Plan, Chapter 6, Residential policies, text). The County may permit residential rezonings at densities up to 4.0 dwelling units per acre in Residential Neighborhoods...in accordance with the policies specific to each type of Residential Land Use (Revised General Plan, Chapter 6, General Residential Policies, policy 2). Residential Neighborhoods will incorporate fully open space at a minimum of 30 percent of the gross acreage of the property and public space at a minimum of 10%. No more than 50 percent of the required open space may be located in the RSCOD (Revised General Plan, Chapter 6, Residential Neighborhood Policies, policies 2 and 3).

The application proposes to maintain 196 single-family detached dwelling units at a density of 1.37 dwelling units per acre as previously approved in ZMAP 2004-0006. Further, this application is proposing an increase in the amount of open space provided from 92.3 acres to 96.9 acres.

**The proposal is in compliance with the Land Use Mix policies of the Revised General Plan.**

### **B. EXISTING CONDITIONS**

The Revised General Plan defines the County's Green Infrastructure as a "collection of natural, cultural, heritage, environmental, protected, passive, and active resources that will be integrated in a related system" (Revised General Plan, Chapter 5, Green Infrastructure Policies, policy 1). Examples of green infrastructure components include stream and river corridors, wetlands, forested areas, tree stands, steep slopes, greenways, trails, historic and archeological sites and other open spaces. Green infrastructure is the framework and unifying element that determines where and how development will occur within Loudoun County (Revised General Plan, Chapter 5, Green Infrastructure Policies, text). The original rezoning was approved using the conservation design method of development, however additional information related to the environmental features on-site have been identified and addressed in the comments below.

#### **1. River and Stream Corridor**

Belmont Glen Village is located within the Goose Creek watershed and includes river and stream corridor resources (Revised General Plan, Chapter 5, River and Stream Corridor Resources Map & Major and Sub-Watersheds Map). The Revised General Plan establishes stream corridor policies that reinforce the important role rivers and stream corridors play in protecting Loudoun County's water resources (Revised General Plan, Chapter 5, River and Stream Corridor Resources and Surface and Groundwater Resources, text). Stream corridor policies include the protection of rivers and streams,

adjacent steep slopes, wetlands, forests, and historic, cultural and archeological resources within the floodplain, and a 50-foot management buffer adjacent to the floodplain and steep slopes (Revised General Plan, Chapter 5, River and Stream Corridor Resources, policy 2). Within the floodplain and 50-foot management buffer, uses are limited to activities that will support and enhance the biological integrity and health of the river and stream corridor, including passive and active recreation, road crossings, pervious paths and trails, and agricultural activities (Revised General Plan, Chapter 5, River and Stream Corridor Resources, policy 18).

This site is bounded by Goose Creek along the western portion of the property. Goose Creek in Loudoun County is designated as a “Scenic River” by the Commonwealth of Virginia and is further protected by Plan policy which calls for the establishment of a 300-foot no-build buffer wherever it exceeds the 50-foot management buffer (Revised General Plan, Chapter 5, Scenic Rivers and the Potomac River, policy 1). The Plan also recommends the voluntary establishment of a greenbelt along Goose Creek and its reservoir which extends 1,000 feet beyond the 300-foot no-build buffer (Revised General Plan, Chapter 6, Green Infrastructure Policy, policy 1).

It appears that the 300-foot Goose Creek Buffer as shown on the CDP includes the river and stream corridor elements, (floodplain, adjacent steep slopes, and the 50-foot management buffer) however, each element itself has not been delineated. The floodplain limits, adjacent steep slopes, and the 50-foot management buffer along with the 300-foot Goose Creek Buffer should be added to the CDP.

The original rezoning was approved with the all of the proposed 196 lots outside of the 300-foot no build buffer. While this proposal has moved most of the lots further away from the buffer, two lots now encroach within the buffer limits. In order to minimize impacts to the riparian corridor, staff recommends removing lots 170 and 171 from the buffer. The encroachment would result in impacts to existing forest cover and steep slopes adjacent to a jurisdictional stream. As stated on in the Plan, “riparian forests along streams provide the greatest single protection of water quality by filtering pollutants from stormwater runoff, decreasing stream bank erosion, and maintaining the physical, chemical, and biological condition of the stream environment” (Revised General Plan, Chapter 6, Forest, Trees and Vegetation, text).

**Staff recommends that the two lots which encroach within the 300’ no build buffer of Goose Creek be reconfigured to be located outside of the buffer and that all the features of the river and stream corridor (floodplain limits, steep floodplain, adjacent steep slopes, and the 50 foot management buffer) be delineated on the CDP.**

## 2. Steep Slopes

The proposed CDP has provided additional information related to steep slopes which was not available at the time of the original rezoning approval. According to the plan submitted there are greater areas of moderately steep slopes and steep slopes than what was previously identified. Moderately steep slopes refer to areas with a 15%-25% grade. Steep slopes include areas greater than a 25% grade (Revised General Plan, Chapter 5, Steep Slopes and Moderately Steep Slopes, text). The hazards associated with the disturbance of steep and moderately steep slopes include erosion, building and/or road failure, and downstream flooding. For these reasons, the Plan calls for the County to prohibit land disturbance on steep slopes and special performance standards when developing on moderately steep slopes (Revised General Plan, Chapter 5, Steep Slopes and Moderately Steep Slopes, policy 3). “Standards will include best management practices, locational clearances for clearing and grading, and approval of natural drainageways” (Revised General Plan, Chapter 5, Steep Slopes and Moderately Steep Slopes, policy 3).

As stated in ERT’s referral dated September 23, 2009, land disturbance associated with residential lots is not a permitted use on very steep slopes, per Section 5-1508(D)(1)(c) of the Revised 1993 Loudoun County Zoning Ordinance. Staff recommends reconfiguring the site to completely avoid very steep slopes or depict potential house, driveway, and limits of clearing and grading on those lots with very steep slopes to demonstrate that there is sufficient buildable area.

***Staff recommends that the project be designed to minimize impacts to moderately steep slopes and that commitments be made to protect the steep slopes areas during construction activities. Staff further defers to the Building and Development Environmental Review team (ERT) for further technical review of this issue.***

## 3. Wetlands

The County’s Predictive Wetlands Model indicates that wetlands exist throughout the site. The County supports the federal goal of no net loss to wetlands (Revised General Plan, Chapter 5, River and Stream Corridor Resources, policy 23) and seeks to protect its green infrastructure elements and recapture elements where possible (Revised General Plan, Chapter 6, Green Infrastructure, text). Mitigating wetland and stream impacts close to the impact area will help maintain water quality and flood protection functions, as well as habitat. Potential wetlands have been identified on-site via the County’s wetlands predictive model.

***Staff recommends the proposed layout maximize protection of jurisdictional wetlands and streams, particularly the south-central wetland system. Staff recommends that the applicant commit to prioritizing any required wetland mitigation as follows: 1) on-site, 2) within the Goose Creek Watershed within the same Planning Policy Area, 3) within the Goose Creek Watershed outside the***

***Planning Policy Area, and 4) Loudoun County, subject to approval by the Army Corp of Engineers and the Virginia Department of Environmental Quality (DEQ).***

#### **4. Stormwater Management**

The Plan states that major water resource issues for the County include protecting groundwater and surface water (i.e., streams and wetlands) from contamination and pollution as well as preventing the degradation of water quality in watersheds (Revised General Plan, Chapter 5, Surface and Groundwater, text). The Plan promotes the use of low impact development (LID) techniques, which integrate hydrologically functional designs with methods for preventing pollution (Revised General Plan, Chapter 5, Surface and Groundwater policy 2). LID uses natural vegetation and small-scale treatment systems to treat and infiltrate rainfall close to the source and can include permeable paving, vegetative buffer or filter strips, and the collection and use of rooftop run-off for irrigation and green roofs.

According to the statement of justification, the elimination of alleys and the revised street design will result in approximately 1.2 acres of impervious surface on the property. It appears that the application is proposing to provide a regional pond rather than using LID standards as approved and proffered in the original rezoning as the LID BMPs have been removed from this plan.

***Staff recommends that the application should include a consistent SWM/BMP approach. Providing additional low impact development facilities throughout the site may also help to meet the FSM Reservoir Protection Requirements which requires a reduction in pollutant load consistent with an average land cover condition of 10 percent impervious cover.***

#### **5. Sustainable and Energy Efficient Design**

The County encourages development that utilizes energy efficient design and construction principles, promotes high performance and sustainable buildings, and minimizes construction waste and other negative impacts (Revised General Plan, as amended by CPAM 2007-0001, Countywide Housing Policies, Guiding Principle 12, pg.

***Staff recommends that the Applicant commit to incorporating sustainable and energy efficient design and construction principles during the development of this project.***

#### **C. SITE DESIGN**

The Revised General Plan states that Residential Neighborhoods should have a variety of housing types and lot sizes, and they are to be developed in accordance with design guidelines and performance standards for efficient site layout, a pedestrian-friendly scale, adequate open space (active, passive, and natural), and the protection and incorporation of the Green Infrastructure.

Design guidelines included in the implementation section of the Revised General Plan outline key design features to be addressed in these developments (Revised General Plan, Chapter 6, Residential Neighborhood Policies, policy 4). The Revised General Plan states that Residential Neighborhoods will exhibit the following design characteristics desired by the County:

- Compact site layout to reduce trips within the neighborhood, facilitate alternative forms of transportation, preserve the Green Infrastructure, and result in reduced transportation and utilities infrastructure costs;
- Pedestrian-scale streetscape including such features as street trees, sidewalks along all street frontage, and street lighting;
- A predominantly interconnected street pattern with inter-parcel connections;
- A combination of neighborhood parks, squares, and greens located throughout the neighborhood within 1500 feet of all residences, and a formal civic square or other public space located in conjunction with a civic facility, Neighborhood Center, or other use, to create a focal point for the community;
- The location of public and civic uses such as churches and community centers in prominent sites to act as landmarks within the neighborhood; and,
- A variety of lot sizes (Revised General Plan, Chapter 6, Residential Neighborhood Policies, Policy 4).

This application is proposing to change the design of the site from a traditional design pattern to a more suburban design pattern. In accordance with Plan policy, residential design elements as outlined above are more traditional in nature where it encourages interconnected streets, pedestrian circulation and convenient public and civic uses. This application proposes to eliminate the rear alleys and grid street pattern and to use cul-de-sacs which are representative of a more suburban style development pattern.

The applicant has stated that the change in design results in the protection of environmental features, and preserving permanent open space and the environmental integrity of the property. As stated in the Plan "In some circumstances the use of cul-de-sacs and curvilinear streets will be essential in order to implement conservation design." (Revised General Plan, Chapter 6, Design Guidelines, Residential Neighborhoods, Streetscape, text). They should be used to the minimum required to address environmental and engineering concerns.

It appears that the development envelope of the site is very similar to that of the original rezoning approval, therefore more information as to the location of the additional protected environmental features should be provided in order to justify the change to the layout of the pedestrian and road network to a more suburban style of development. The original design of this project was more in keeping with Plan policy than the proposed design.

Several design elements could be added to this application to better incorporate the design objectives of the Plan for a residential community. They are as follows:

- The layout of the site could provide more connectivity for pedestrians such as sidewalks on both sides of the street;
- Better pedestrian connections to the community center/pool, particularly between lots 163-164 and 120-121;
- Front loaded garages set back from the front of the homes; and,
- Pedestrian-scale streetscape including such features as street trees, benches, and street lighting.

***Staff recommends that the applicant provide additional information and justification as to why the change in site design better implements the Plan's objectives for this community with respect to environmental features which may not have been protected in the original development's design. Staff further recommends that design elements, such as outlined above, be incorporated in the design to create a development that exhibits a more traditional development pattern.***

#### **D. PEDESTRIAN AND BICYCLE LINKAGE**

The County is committed to establishing an integrated trails system for pedestrians and cyclists, and will work to establish connections among pedestrian and bicycle sidewalks, paths, and trails (Revised General Plan, Chapter 5, Greenways and Trails, text). All development proposals need to include pedestrian and bicycle design and a development program that is consistent with national guidelines, including the AASHTO Guide for the Development of Bicycle Facilities, the Americans with Disabilities Act Accessibility Guidelines (ADAAG), and the Loudoun County Bicycle and Pedestrian Facility Design Toolkit (Bike/Ped Plan, Transportation Project Development Policies, policy 2). Regarding internal pedestrian connections, five foot wide sidewalks on both sides of the street should be provided, consistent with the Bike/Ped Plan (Bike/Ped Plan, Walkway & Sidewalk Policies, policy 2a).

***Staff recommends that sidewalks be provided on both sides of the street to fully implement the policies of the Bike/Ped Plan. Further, staff recommends that in order to access the community center, a pedestrian access be established between lots 163-164 and 120-121.***

#### **E. UNMET HOUSING NEEDS**

On September 18, 2007, the Board of Supervisors adopted revised housing policies that recognize that unmet housing needs occur across a broad segment of the County's income spectrum and promote housing options for all people who live and/or work in Loudoun County (Revised General Plan, as amended by CPAM 2007-0001, Countywide Housing Policies, Chapter 2, Housing text). Unmet housing needs are defined as the lack of housing options for households earning up to 100% of the



Washington Metropolitan Area Median Income (AMI, \$99,000 for 2008) (Revised General Plan, Glossary and CPAM 2007-0001, Countywide Housing Policies, Guiding Principles, policy 2). Developers of residential and mixed-use projects are encouraged to include funding commitments and proffers to fulfill unmet housing needs in their development proposals (Revised General Plan, as amended by CPAM 2007-0001, Countywide Housing Policies, Funding Policies, policy 1).

The County encourages each development proposal that includes a residential component to address unmet housing needs recognizing that the largest segment of unmet needs is housing for incomes below 30% (Revised General Plan, as amended by CPAM 2007-0001, Countywide Housing Policies, Guiding Principles, policy 14). Plan policies encourage the development of housing for special needs populations (low income residents, elderly residents requiring congregate care, disabled residents and the homeless) as well as the application of universal design principles (Revised General Plan, as amended by CPAM 2007-0001, Countywide Housing Policies, Guiding Principles, policies 8 and 11).

***Staff recommends a commitment that addresses the full spectrum of unmet housing needs up to 100% of the AMI, recognizing that the largest segment of unmet housing needs is housing for incomes below 30% of the AMI. Staff also encourages the Applicant to consider incorporating housing for special needs populations as well as universal design principles into the project.***

#### **F. CAPITAL FACILITIES**

Under the Revised General Plan, all residential rezoning requests will be evaluated in accordance with the Capital Facility policies of the Plan (Revised General Plan, Chapter 3, Proffer Policies, policy 3). The Revised General Plan calls for capital facilities contributions valued at 100 percent of capital facility costs per dwelling unit at densities above the specified base density (Revised General Plan, Proffer Guidelines, Capital Facilities, policy 1).

***The application is proposing no changes in residential acreage, unit number, unit type or density with this application, therefore the previously proffered capital facilities contribution of \$\$5,793.23 per unit as specified in the previously approved proffers of ZMAP 2004-0006 shall be retained.***

#### **G. OPEN SPACE PRESERVATION PROGRAM**

To achieve higher density housing, "the Board of Supervisors anticipates evidence of participation in the Open Space Preservation Program". "Land contribution on an acre-by-acre basis is desired. However, if the land offered does not suit the County in terms of quality or location, the County may consider cash in lieu of the land for the purchase of open space. The County anticipates that cash donations for open space will be spent in the Suburban Community in which the increased density is granted" (Revised General Plan, Chapter 11, Proffer Guidelines, Open Space, policy 3). Contributions

should be provided to enable the County to purchase Suburban Policy Area open space to offset the density proposed by the development.

***The application has been revised and is proposing no changes in residential acreage, unit number, unit type or density with this application, therefore the previously proffered open space shall be retained.***

#### **MODIFICATIONS**

The applicant is also requesting a several Zoning Ordinance Modifications (ZMODs) for the proposed project relating to Affordable Dwelling Units (ADUs), buffer requirements for lots 37-40 and lots 48-51, and the height restriction for lot 40. These modifications are comparable and consistent with those approved in the original rezoning.

***Staff has no issues with the proposed zoning modifications.***

#### **RECOMMENDATION**

This proposal is consistent with the land use policies of the Revised General Plan for the development of residential uses in this location. However, staff is not able to fully evaluate the proposal until such time as the issues outlined in this referral related to the 300-foot Goose Creek no build buffer, steep slopes and wetlands, site design of the street layout and pedestrian circulation network and unmet housing needs have been addressed.

Staff is available to meet with the applicant to discuss these issues.

Cc: Julie Pastor, AICP, Planning Director  
Cindy Keegan, AICP, Program Manager, Community Planning, via e-mail